CLAIM AMENDMENTS

WHAT IS CLAIMED IS:

1. **(Currently Amended)** An arrangement for the determination of the dynamic axle loads and/or the wheel loads of a wheel vehicle ~~(20)~~, ~~with~~**comprising:**

- a measuring device ~~(1)~~ arranged in the wheel vehicle ~~(20)~~ or which can be arranged in the wheel vehicle, ~~in which case~~**wherein** ~~the~~ **said measuring device (1) has been developed in such a way that it can being operable to** measure at least two linear accelerations of a wheel vehicle ~~(20)~~ oriented transversally with respect to each other and **to measure** three rotation rates of a rotation movement or of a component of a rotation movement around a coordinate axis of the wheel vehicle, ~~(20) in each case~~**respectively,** ~~in which case the~~**wherein** said three coordinate axes extend transversally with respect to each other, and

- an evaluation device ~~(9)~~, ~~which has been connected to and developed~~**coupled** with the measuring device ~~(1)~~ and **operable to determine** at least one axle load and/or one wheel load~~, is determined~~ by means of **the** at least two linear accelerations and **the** three rotation rates ~~with the aid of said evaluation device~~.

2. **(Currently Amended)** An arrangement according to claim 1, ~~in which case~~ **wherein** the measuring device ~~(1)~~ has acceleration sensors ~~(31, 32, 33)~~ in order to measure the linear accelerations and rotation rate sensors ~~(41, 42, 43)~~ to measure the three rotation rates, ~~in which case the~~**wherein** said acceleration sensors ~~(31, 32, 33)~~ and the rotation rate sensors ~~(41, 42, 43)~~ are parts of a prefabricated unit ~~(2)~~ embodied in accordance with equipment engineering so that they can be installed in the wheel vehicle ~~(20)~~.

3. **(Currently Amended)** **An arrangement according to claim 1, wherein** ~~Arrangement according to claim 1 or 2, in which case~~ the measuring device ~~(1)~~ ~~has been embodied in such a way that~~ **is operable to measure** the at least two linear accelerations ~~can be measured~~ as linear measured quantities, which do not depend on each other.

4. **(Currently Amended)** **An arrangement according to claim 1, wherein** ~~Arrangement according to one of the claims 1 to 3, in which case~~ the measuring device ~~(1)~~ has been embodied in such a way that the three coordinate axes extend vertically with respect to each other in pairs.

5. **(Currently Amended)** **An arrangement according to claim 1, wherein**~~Arrangement according to one of the claims 1 to 4, in which case,~~ in order to measure the rotation rates and to measure the linear accelerations, the measuring sensors of the measuring device ~~(1)~~ are ~~preferably~~ fitted to a vehicle structure ~~(28)~~ moving relative to a running gear ~~(29)~~ of the motor vehicle.

6. **(Currently Amended)** **An arrangement according to claim 1, wherein** ~~Arrangement according to one of the claims 1 to 5, in which case~~ the evaluation device ~~(9)~~ has a computation unit ~~(11)~~, which ~~has been embodied in such a way that~~ **is operable to calculate,** by using a measured value measured by the measuring device ~~(1)~~ for a linear acceleration oriented transversally to the plane of a vehicle subsurface, ~~(30)~~ at least one part of the axle load and/or a part of the wheel load ~~is calculated~~.

7. **(Currently Amended)** **An arrangement according to claim 1, wherein** ~~Arrangement according to one of the claims 1 to 6, in which case~~ the evaluation device ~~(9)~~ has a computation unit ~~(11)~~, which ~~has been embodied in such a way that~~**is operable to calculate,** by using the three rotation rates, at least one part of the axle load and/or a part of the wheel load ~~is calculated~~, which is generated by a rotation movement of the wheel vehicle and/or by a rotation movement of a part of the wheel vehicle.

8. **(Currently Amended)** **An arrangement according to claim 1, wherein** ~~Arrangement according to one of the claims 1 to 7, in which case~~ the evaluation device ~~(9)~~ has a computation unit ~~(11)~~, which ~~has been embodied in such a way that~~**is operable to calculate the axle load and/or the wheel load**, with due consideration of a, in particular damped, suspension (40, 41, 43) between at least one of the wheels (21, 22, 23, 24) of the wheel vehicle ~~(20)~~ and a vehicle structure ~~(28)~~, ~~the axle load and/or the wheel load is calculated~~.

9. **(Currently Amended)** ~~**Method**~~ **A method** for the determination of the dynamic axle loads and/or the wheel loads of a wheel vehicle ~~**(20)**~~, ~~**in which case**~~**the method comprising the steps of:**

- **measuring** in the wheel vehicle ~~**(20)**~~ at least two linear accelerations of a wheel vehicle ~~**(20)**~~ oriented transversally with respect to each other and three rotation rates of a rotation movement or of a component of a rotation movement around a coordinate axis of the wheel vehicle**, respectively** ~~**(20) are measured in each case, in which case the**~~**wherein** said three coordinate axes extend transversally with respect to each, and
- **determining at least one axle load and/or one wheel load of the wheel vehicle,** by using the at least two linear accelerations and three rotation rates ~~**at least one axle load and/or one wheel load of the wheel vehicle (20) is determined**~~.

10. **(Currently Amended)** ~~**Method**~~ **A method** according to claim 9, ~~**in which case**~~**wherein** the linear accelerations are measured with acceleration sensors ~~**(31, 32, 33)**~~ and the rotation rates with rotation rate sensors ~~**(41, 42, 43)**~~ and ~~**in which case the**~~**wherein** said acceleration sensors ~~**(31, 32, 33)**~~ and the rotation rate sensors ~~**(41, 42, 43)**~~ are parts of a prefabricated unit ~~**(1)**~~ embodied in accordance with equipment engineering so that they can be installed in the wheel vehicle ~~**(20)**~~.

11. **(Currently Amended)** **A method according to claim 9, wherein** ~~**Method according to claim 9 or 10, in which case**~~ the at least two linear accelerations are measured as linear measured quantities, which do not depend on each other.

12. **(Currently Amended)** **A method according to claim 9, wherein** ~~Method according to one of the claims 9 to 11, in which case~~ the three coordinate axes extend vertically with respect to each other in pairs.

13. **(Currently Amended)** **A method according to claim 9, wherein** ~~Method according to one of the claims 9 to 12, in which case~~ the rotation rates and the linear accelerations are measured as rotation rates and linear accelerations of a vehicle structure ~~(28)~~ moving relative to a running gear of the motor vehicle ~~(29)~~.

14. **(Currently Amended)** **A method according to claim 9, wherein,** ~~Method according to one of the claims 9 to 13, in which case~~ by using a measured value measured in the wheel vehicle ~~(20)~~ for a linear acceleration oriented transversally to the plane of a vehicle subsurface, ~~(30)~~ at least one part of the axle load and/or a part of the wheel load is calculated.

15. **(Currently Amended)** **A method according to claim 9, wherein,** ~~Method according to one of the claims 9 to 14, in which case~~ by using the three rotation rates, at least one part of the axle load and/or a part of the wheel load is calculated, which is generated by a rotation movement of the wheel vehicle ~~(20)~~ and/or by a rotation movement of a part of the wheel vehicle ~~(20)~~.

16. **(Currently Amended)** **A method according to claim 9, wherein,** ~~**Method according to one of the claims 9 to 15, in which case**~~ with due consideration of a, in particular damped, suspension ~~**(40, 41, 43)**~~ between at least one of the wheels ~~**(21, 22, 23, 24)**~~ of the wheel vehicle ~~**(20)**~~ and a vehicle structure ~~**(28)**~~, the axle load and/or the wheel load is calculated.

17. **(Currently Amended)** **A method according to claim 9, further comprising the step of forecasting whether or not a wheel of the wheel vehicle or a plurality of wheels of the wheel vehicle will lose roadholding and thus the grip to a subsurface,** ~~**Method for predicting a driving situation, in which case**~~ by using **the calculated** at least two axle loads and/or wheel loads ~~**calculated in accordance with the method according to one of the claims 9 to 16, it is possible to forecast whether or not a wheel (21, 22, 23, 24) of the wheel vehicle (20) or a plurality of wheels (21, 22, 23, 24) of the wheel vehicle (20) will lose roadholding and thus the grip to a subsurface (30)**~~.

18. **(NEW)** An arrangement for the determination of the dynamic axle loads and/or the wheel loads of a vehicle, comprising:

- a measuring device for measuring:
- at least two linear accelerations of the vehicle oriented transversally with respect to each other, and
- three rotation rates of a rotation movement or of a component of a rotation movement around a coordinate axis of the vehicle, wherein said three coordinate axes extend transversally with respect to each other, and
- an evaluation device coupled with the measuring device for determining at least one axle load and/or one wheel load by the at least two linear accelerations and the three rotation rates.

19. **(NEW)** An arrangement according to claim 18, wherein the measuring device comprises acceleration sensors for measuring the linear accelerations and rotation rate sensors for measuring the three rotation rates.

20. **(NEW)** An arrangement according to claim 18, wherein the measuring device is operable to measure the at least two linear accelerations as linear measured quantities, which do not depend on each other.